



Colorado Department
of Public Health
and Environment

Pertussis Specimen Collection

Materials for Pertussis Nasal Wash & Nasopharyngeal Swab Collection:

- **Gloves** (suggested gloves are latex-free)
- **Mask** for covering nose and mouth of health worker
- **Biohazard bag** for disposal of used tubing, syringe, saline container, swabs
- **Facial tissues** (for patient use)
- **Eye protection/goggles** for health worker (to protect from coughs, sneezes, or splashes)
- **Shipping container with return mailing labels, cold packs, and lab requisition form**
- **Biohazard label**

NASAL WASH COLLECTION

Additional Materials for Nasal Wash Collection:

- **0.9% saline:** 6 ml sterile, non-bacteriostatic
- **Sterile specimen container**, tight sealing, leak-proof
(such as a sterile sputum or urine cup)
- **Sharps container**
- **Sterile feeding tube** #8 French, 16" length
- **5cc disposable syringe with disposable needle for drawing saline**
(FIGURE: BECTON-DICKINSON, MICROBIOLOGY SYSTEMS, SPARKS, MD)



Procedure:

1. Attach the needle to the syringe and draw 3 ml of sterile, non-bacteriostatic saline into the barrel of the syringe. Remove needle and put it in the sharps container.
2. Attach a soft feeding tube to the syringe tip. Slowly push saline through the tube and let a drop or two come out of the tip for lubrication.
3. Put on your gloves and mask/goggles.
4. Patient may be seated or lying down for specimen collection. The patient's head should be tilted back with their neck extended to allow for the pooling of the aspirate in the nasopharynx.
5. Instruct the patient to hold their breath and not to swallow during the procedure if possible. Tell the patient the procedure will not hurt, but may tickle or cause them to tear or even sneeze.
6. Insert the feeding tube about 3-4" (less for a child) **straight back** (not upwards) along floor of the nasal passage until reaching the posterior wall of the nasopharynx. The distance from the nose to the ear gives an estimate of the distance the feeding tube should be inserted.
7. Using a smooth motion without moving the feeding tube, quickly push and then pull the syringe plunger to inject the saline and withdraw the fluid. This must be done quickly to prevent the fluid from draining down the patient's throat.
8. Carefully remove the feeding tube from the nose.
9. Detach the feeding tube from the syringe.
10. Inject the contents of the syringe into the specimen container.
11. Offer the patient a tissue if necessary.
12. Place used equipment (feeding tube, syringe, saline bottle) in the biohazard bag for disposal.
13. Label the specimen and complete a CDPHE requisition form. Ship the specimen with cold packs in

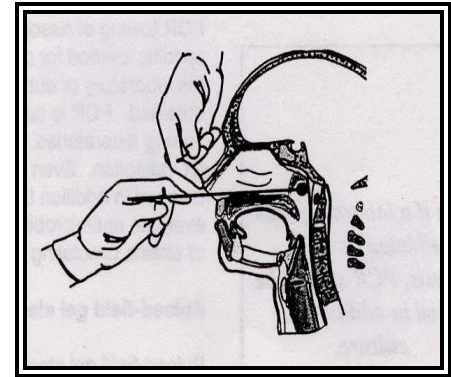
an insulated container to the Laboratory Services Division, Molecular Science Laboratory, 8100 Lowry Blvd., Denver 80230. Same day or overnight delivery of the specimen is preferred. Specimens not sent immediately should be refrigerated until shipment, unless specimen delivery will be more than 72 hours after collection. Specimens that cannot be delivered to the laboratory within 72 hours following collection should be stored in the freezer and shipped frozen. Call 303-692-3286 if you have questions.

Note: Nasal wash is the preferred specimen; however, nasopharyngeal swab is acceptable.

NASOPHARYNGEAL SWAB COLLECTION

Additional Materials for Nasopharyngeal Swab Collection

- Polyester (such as Dacron) or rayon-tipped nasopharyngeal swab with an aluminum shaft*
- Test tube with screw cap, plastic preferred
- Sterile saline, non-bacteriostatic, 3 ml



* Cotton-tipped or calcium alginate swabs are **not** acceptable. Residues present in these materials may inhibit PCR assays.

A video of NP swab collection is available at: <http://video.cdc.gov/asxgen/nip/isd/swabdemo.wmv>

Procedure:

1. Put 3 ml of sterile, non-bacteriostatic saline in a test tube and set aside until step #5.
2. Gently insert swab into a nostril **straight back** (not upwards), along the floor of the nasal passage until reaching the posterior wall of the nasopharynx. The distance from the nose to the ear gives an estimate of the distance the swab should be inserted.
Note: Do not force swab - if an obstruction is encountered, try the other nostril.
3. Leave swab in place for up to 10 seconds.
4. Remove swab slowly.
5. Immediately place swab into the test tube containing 3 ml of sterile saline. Leave swab in saline for approximately 5 minutes. As you remove the swab, press it against the side of the test tube. Close the test tube and discard the swab in a biohazard bag.
6. Label the specimen and complete a CDPHE requisition form. Ship the specimen with cold packs in an insulated container to the Laboratory Services Division, Molecular Science Laboratory, 8100 Lowry Blvd., Denver 80230. Same day or overnight delivery of the specimen is preferred. Specimens not sent immediately should be refrigerated until shipment, unless specimen delivery will be more than 72 hours after collection. Specimens that cannot be delivered to the laboratory within 72 hours following collection should be stored in the freezer and shipped frozen. Call 303-692-3286 if you have questions.

Tip: If patient is seated for the procedure, have patient sit with head against a wall as patients have a tendency to pull away during the procedure.

Information: Molecular Science Laboratory, (303) 692-3286. To reorder kits go to:
<http://fs8.formsite.com/cohealth/form954776124/>